Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

aQC924
.A8A8
c2

Avalanche Notes

U.S. Forest Service
Westwide Avalanche Network

NOVEMBER 1992

The Pacific High was strong in November and sat firmly entrenched off the California coast. This kept the Sierra dry while the storm track rode well to the north and brought a series of storms from Alaska southeastward to the Cascades and Rockies. Alyeska, AK recorded snow on 22 of 30 days, got 32" on the 27th-29th, and finished November with 175% of normal. Mt. Rainier, WA received 65" on the 18th-23rd and wound up with 98% of normal. Alpine Meadows, CA was far from the snow belt and recorded but 17% of normal.

Snowbird, UT got 18" on the 2nd, 27" on the 20th-21st, and 47" on the 23rd-24th to reach 175% for the month. Alta, UT set a new record for 24-hour snowfall at its upper study plot when 48" fell on the 23rd! Alta reported 160% of normal for the month.

In Colorado, storms favored the northern half of the state: Winter Park, Berthoud Pass, A Basin, and Vail all recorded snow on the 1st-11th. On the 1st-3rd, Vail got 30" and Gothic, 25". On the 10th, Beaver Creek got 22", and Aspen Highlands received 27" on the 9th-11th. For the month, Berthoud Pass recorded 130% of normal; Gothic and the town of Winter Park, 120%; Winter Park ski area, 100%; and Wolf Creek, in far southern Colorado, 81%.

Avalanche activity naturally followed the storms. Alyeska saw activity all month. Aspen Highlands recorded a cycle of natural releases on the 10th caused by the storm noted above. The storms that hit the Wasatch of Utah caused extensive avalanching: Alta recorded 166 for November, and Snowbird, 199.

Two fatal avalanche accidents occurred in November. Ironically, both were at places called Flattop Mountain and claimed two lives each. On November 1, two climbers failed to return from a climb in Rocky Mountain National Park, CO. A rescue team found their unoccupied camp, their packs and ice axes placed on a rock ledge near the top of a snow-filled, ice gully on the east side of Flattop Mt. They also found a 15-foot-wide chunk of cornice had fallen from the ridge and a fresh avalanche had swept the entire gully. The victims bodies have not yet been recovered. Rescuers guess that the two men were on the final pitch when the cornice collapsed, and the avalanche caused the fatal fall.

On November 11 on Flattop Mt. in Chugach State Park near Anchorage, AK, blizzard conditions raged as a party of four ski mountaineers ascended a snow-filled gully. They triggered an avalanche that caught three of the four. One was partly buried, and two were totally buried. Without beacons, the two survivors could do little in the hostile weather. Four hours later, rescuers arrived, picked up a beacon signal, and located the first victim beneath 4-1/2 feet of snow. (This was the only operating beacon in the party.) A short time later, rescuers found an unattached ski pole, probed in that area, and found

Rocky Mountain Forest and Range Experiment Station

the second victim, also 4-1/2 feet deep. He had a beacon in his pack that was turned off. Both men had died of suffocation.

There were eight other incidents reported in which seven patrollers and one lift skier were caught. Through November, 10 incidents resulted in 13 people caught, 1 partly buried, 4 buried, and 4 killed.

WINTER OF 1991-92 REVISITED

Five additional avalanche deaths were reported since last April's issue of Avalanche Notes was published. On June 13, 1992, a party of climbers on South Maroon Peak near Aspen, CO, triggered a wet-slab avalanche. Six were caught, two were injured, and two were killed. On June 18, 1992, a climbing party on Mt. Foraker, AK, triggered an avalanche that caught three, injured one, and killed two. Finally in July, the body of an out-of-bounds skier was found in melting avalanche debris outside the Beaver Creek, CO, ski area. He had been reported missing on February 18. (See the February 92 issue of Avalanche Notes.) These five deaths raise the 91-92 avalanche toll from 18 to 23.

ISSW'92

More than 350 people attended the International Snow Science Workshop on October 4-8, 1992, at Breckenridge, CO. Avalanche practitioners and snow scientists from 10 countries participated in the workshop which offered 36 papers, 14 poster presentations, and 11 commercial exhibits. Ed LaChapelle was the banquet speaker, and the AAAP held its annual meeting during the course of the ISSW. The only casualty was the field day which was snowed out.

DATELINE ... COLORADO

The Colorado Avalanche Information Center has entered into a new agreement with the Colorado Department of Transportation to provide avalanche forecasting for U.S. 550 over Red Mountain Pass in southwestern Colorado. The Center opened an office in Silverton and hired Don Bachman and Denny Hogan, two experienced and savvy avalanche hands, to staff the new office. Almost before it began, the new project was dealt a jolting body-punch on November 30 when fire destroyed the Silverton town hall ... and the avalanche center's new office. But like the phoenix, the Silverton center has risen from the ashes, relocated in a new building, and returned to the business of avalanche safety along the region's highways.

U.S. FOREST SERVICE
WESTWIDE WEATHER AND AVALANCHE NETWORK
FORT COLLINS, COLORADO

NOVEMBER 1992
SUMMARY OF WEATHER AND SNOW CONDITIONS

	SNOWFALL				WATER EQUIVALENT							SNOW DEPTH				TEMPERATURE			WIND SPEED AND DIRECTION					
	TOTAL SNOW-		MAX IN 24 HR.	D A T	TOTAL	MAX IN 24 HR.	D A T	NUMBER OF DAYS					D A T			MEAN	MEAN		AVG FOR	6 HOUR PERIODS		FASTEST		D A T
AREA	FALL IN.	AVG DEN	IN.	E	WATER IN.	IN.	E	GE .1	GE .2	GE .5	GE 1.0	MAX IN.	E	MIN IN.	AVG IN.	MAX	MIN	AVG	MO. MPH	GE 15	GE 20	MPH	DIR.	E
CENTRAL AND SOUTHERN ROCKY MOUNTAINS																DEGREES F								
ARAPAHOE BASIN, COLO	61.9	--	9	10	--	--	--	--	--	--	--	--	--	--	--	23.5	5.6	14.6	--	--	--	--	--	--
ASPEN HIGHLANDS, CO	49.2	--	18	10	--	--	--	--	--	--	--	30	11	10	19	27.3M	12.1M	19.7M	--	--	--	--	--	--
BEAR LAKE, RMNP, CO	52.8	.05	14	21	2.85	1.00	4	9	3	2	1	27	21	1	15	25.2M	7.5M	16.3M	--	--	--	--	--	--
BEAVER CREEK, COLO	--	--	--	--	--	--	--	--	--	--	--	43	10	10	30	--	--	--	--	--	--	--	--	--
BERTHOUD PASS, COLO	59.6	.07	11	2	3.94	.78	2	14	7	2	0	26	11	11	21	22.2	6.2	14.2	12.3	42	26	37	270	30
BRECKENRIDGE, COLO	43.5	--	5	1	--	--	--	--	--	--	--	22	11	5	18	20.8M	8.3M	14.6M	10.2M	26M	10M	--	--	--
GOTHIC, COLO	62.3	.06	11	10	3.98	.68	10	10	7	4	0	28	10	18	22	27.5	5.3	16.4	--	--	--	--	--	--
KEYSTONE, COLO	33.0	--	8	10	--	--	--	--	--	--	--	22	24	13	18	27.7M	6.3M	17.0M	--	--	--	--	--	--
VAIL, COLO	78.9	.08	14	2	6.05	1.55	2	11	9	4	1	36	10	15	31	21.1M	10.6M	15.9M	6.0M	0M	0M	15	160	9
WINTER PARK 1E, COLO	41.2	.06	6	10	2.59	.46	3	10	4	0	0	20	11	5	14	26.1	7.1	16.6	--	--	--	--	--	--
WINTER PARK S.A., CO	68.1	--	10	2	--	--	--	--	--	--	--	27	11	14	21	20.0M	10.2M	15.1M	--	--	--	--	--	--
WOLF CREEK, COLO	49.7	.07	11	11	3.65	1.00	11	12	7	2	1	37	24	23	30	29.3M	10.7M	20.0M	14.3M	35M	20M	--	--	--
INTERMOUNTAIN																								
SNOWBIRD, UTAH	116.0	.08	33	23	8.98	2.20	23	12	9	5	4	69	24	10	37	29.6M	13.1M	21.3M	17.7M	54M	26M	--	--	--
TETON PASS, WYO 22	39.6	.11	13	2	4.41	2.02	2	5	5	4	1	--	--	--	--	20.2	9.3	14.7	--	--	--	--	--	--
WEST COAST																								
ALPINE MEADOWS, CAL	6.5	.15	3	22	1.05	.61	22	3	2	1	0	6	25	1	3	42.9	28.7	35.8	--	--	--	--	--	--
ALYESKA, ALASKA	100.6	.09	15	29	14.57	2.19	24	18	15	9	5	80	30	23	45	31.0	23.8	27.4	5.3	1	0	17	110	22
MT. RAINIER PARADISE	119.0	.14	20	22	20.25	3.19	22	19	17	16	8	67	30	10	32	35.7	23.6	29.7	6.5M	13M	4M	33	290	7
SQUAW VALLEY, CALIF	1.1	.14	1	20	.37	.14	20	2	0	0	0	2	20	1	1	45.6M	23.0M	34.3M	--	--	--	--	--	--

-- DATA INCOMPLETE OR MISSING
M-ONE OR MORE DAYS OF RECORD MISSING-IF AVERAGE VALUE IS ENTERED, LESS THAN 10 DAYS RECORD IS MISSING
IF M IS ENTERED IN WIND SPEED COLUMN, LESS THAN 37 6-HOUR PERIODS ARE MISSING
GE--GREATER THAN OR EQUAL TO

U.S. FOREST SERVICE
WESTWIDE WEATHER AND AVALANCHE NETWORK
FORT COLLINS, COLORADO

NOVEMBER 1992
AVALANCHE SUMMARY

AREA	TOTAL AVALS THIS MONTH NO.	TOTAL AVALS THIS WINTER NO.	DATES OF MAX IN ONE DAY FIRST	DATES OF MAX IN ONE DAY LAST	DATES OF MAX IN ONE DAY NO.	DATES OF MAX IN ONE DAY DATE	NUMBER OF DAYS WITH AVALS	NUMBER OF DAYS WITH SLUFFS	TYPE OF AVALANCHE ARTIFICIAL	TYPE OF AVALANCHE NATURAL	SLABS HARD	SLABS SOFT	SLABS WET	LOOSE	FRACTURE LINE HEIGHTS IN FEET GE 2	FRACTURE LINE HEIGHTS IN FEET GE 4	FRACTURE LINE HEIGHTS IN FEET GE 6	VERTICAL DESCENT IN FEET GE 200	VERTICAL DESCENT IN FEET GE 500	VERTICAL DESCENT IN FEET GE 1000	VERTICAL DESCENT IN FEET MAX FEET	AVALS ACROSS MAJOR ACCESS ROADS NO.
CENTRAL AND SOUTHERN ROCKY MOUNTAINS																						
ARAPAHOE BASIN, COLO	9	9	9	25	5	11	4	0	4	5	0	9	0	0	7	0	0	9	0	0	450	0
ASPEN HIGHLANDS, COL	36	36	10	30	25	10	6	0	2	34	0	35	0	1	0	0	0	11	8	7	2500	0
BEAVER CREEK, COLO	1	1	29	29	1	29	1	0	1	0	0	0	0	1	0	0	0	0	0	0	75	0
BERTHOUD PASS U.S.40	2	2	29	30	1	30+	2	0	1	1	1	1	0	0	1	1	0	1	1	1	1600	0
BERTHOUD PASS, COLO	7	7	30	30	7	30	1	0	0	7	0	7	0	0	1	0	0	6	5	0	500	0
BRECKENRIDGE, COLO	5	5	14	14	5	14	1	0	5	0	4	1	0	0	5	0	0	3	0	0	400	0
GOTHIC, COLO	10	10	1	21	6	10	4	0	0	10	0	0	0	10	0	0	0	10	8	2	1200	0
LOVELAND PASS U.S. 6	5	5	30	30	5	30	1	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
TELLURIDE, COLO	7	7	20	26	3	26	3	0	7	0	2	5	0	0	1	0	0	3	1	0	500	0
URAD MINE, COLO	4	4	23	30	3	30	2	0	0	4	1	2	0	1	1	0	0	4	3	0	900	0
WOLF CREEK, COLO	8	8	11	20	7	20	2	0	5	3	0	8	0	0	0	0	0	4	0	0	310	0
WEST COAST																						
ALYESKA, ALASKA	41	41	3	29	12	6	9	0	27	14	0	36	0	5	16	2	1	36	32	20	1600	0
CRYSTAL MTN, WASH	12	12	11	30	5	22+	3	0	12	0	0	12	0	0	0	0	0	12	3	0	800	0
MT. HOOD MEADOWS	26	26	20	30	13	21	5	0	24	2	0	26	0	0	1	0	0	9	2	1	1500	0

-- = DATA INCOMPLETE OR MISSING
GE = GREATER THAN OR EQUAL TO
+ = ALSO OCCURRED ON OTHER DATES